

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-14 (Canceled).

Claim 15 (Currently Amended): A method for the ~~diagnosis or~~ detection of a prion disease within a subject suspected of suffering from such a disease, the method comprising:

(i) contacting a sample from said subject with a peptide or a protein selected from the group consisting of Apolipoprotein B; a fragment of Apolipoprotein B; Apolipoprotein E; and a fragment of Apolipoprotein E;

(ii) contacting the preparation obtained in step (i) with PrP^C or a PrP^C containing mixture[[s]]; and

(iii) determining the presence and/or an amount of PrP^{Sc} in said sample;

wherein the presence of PrP^{Sc} in said sample is indicative of the presence of prions in said subject.

Claim 16 (Cancelled)

Claim 17 (Previously Presented): The method of claim 15, wherein the prion disease is bovine spongiform encephalopathy (BSE).

Claim 18 (Previously Presented): The method of claim 15, wherein the prion disease is a Creutzfeld-Jacob disease.

Claim 19 (Currently Amended): A method for the detection of PrP^{Sc} within a sample, ~~the method~~ comprising:

(i) contacting said sample with a peptide or a protein selected from the group consisting of Apolipoprotein B; a fragment of Apolipoprotein B; Apolipoprotein E; and a fragment of Apolipoprotein E;

(ii) contacting the sample obtained in (i) with PrP^C or a PrP^C containing mixture[[s]]; and

(iii) determining the presence and/or an amount of PrP^{Sc} in said sample,
wherein the presence of PrP^{Sc} indicates that said sample contained PrP^{Sc}.

Claim 20 (Currently Amended): A method for identifying, in a sample, a compound which modulates the transition of PrP^C into PrP^{Sc}, ~~the method~~ comprising:

(i) contacting said sample with a peptide or a protein selected from the group consisting of Apolipoprotein B; a fragment of Apolipoprotein B; Apolipoprotein E; and a fragment of Apolipoprotein E (a) in the presence of said modulatory compound and (b) in the absence of said compound;

(ii) contacting the preparation obtained in step (i) a and (i) b with PrP^C or a PrP^C containing mixture[[s]]; and

(iii) determining the amount of PrP^{Sc} (a) in the presence of said modulatory compound and (b) in the absence of said modulatory compound,

wherein the presence of PrP^{Sc} identifies a compound that modulates the transition of PrP^C into PrP^{Sc}.

Claim 21 (Previously Presented): The method of claim 15, wherein the peptide or the protein contains the sequence of SEQ ID NO: 3.

Claim 22 (Previously Presented): The method of claim 15, wherein the peptide or the protein has a molecular weight from 30 and 40 kDa and has a sequence ~~obtained from fragments of~~ selected from the group of Apolipoprotein B between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, and 3291-3815.

Claims 23-28 (Canceled)

Claim 29 (Previously Presented): The method of claim 15, wherein the protein is Apolipoprotein B or a fragment thereof.

Claim 30 (Previously Presented): The method of claim 15, wherein the peptide or the protein forms a complex with a LDL receptor.

Claim 31 (Previously Presented): The method of claim 15, wherein the peptide or the protein contains the sequence of SEQ ID NO: 3.

Claim 32 (Currently Amended): The method of claim 15, wherein the peptide or the protein has a molecular weight from 30 and 40 kDa and ~~has a sequence obtained from fragments of~~ is a fragment of Apolipoprotein B comprising the consecutive amino acid residues between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, ~~and~~ or 3291-3815.

Claim 33 (Cancelled)

Claim 34 (Previously Presented): The method of claim 19, wherein the protein is Apolipoprotein B or a fragment thereof.

Claim 35 (Previously Presented): The method of claim 19, wherein the peptide or the protein forms a complex with a LDL receptor.

Claim 36 (Previously Presented): The method of claim 19, wherein the peptide or the protein contains the sequence of SEQ ID NO: 3.

Claim 37 (Currently Amended): The method of claim 19, wherein the peptide or the protein has a molecular weight from 30 and 40 kDa and ~~has a sequence obtained from fragments of~~ is a fragment of Apolipoprotein B comprising the consecutive amino acid residues between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, ~~and~~ or 3291-3815.

Claim 38 (Currently Amended): The method of claim 19, wherein the prion disease is selected from the group consisting of bovine spongiform encephalopathy (BSE) and [[a]] Creutzfeld-Jacob Disease (CJD).

Claim 39 (Previously Presented): The method of claim 20, wherein the protein is Apolipoprotein B or a fragment thereof.

Claim 40 (Previously Presented): The method of claim 20, wherein the peptide or the protein forms a complex with a LDL receptor.

Claim 41 (Previously Presented): The method of claim 20, wherein the peptide or the protein contains the sequence of SEQ ID NO: 3.

Claim 42 (Currently Amended): The method of claim 20, wherein the peptide or the protein has a molecular weight from 30 and 40 kDa and ~~has a sequence obtained from fragments of~~ is a fragment of Apolipoprotein B comprising the consecutive amino acid residues between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, ~~and~~ or 3291-3815.

Claim 43 (Currently Amended): The method of claim 20, wherein the prion disease is selected from the group consisting of bovine spongiform encephalopathy (BSE) and ~~[[a]]~~ Creutzfeld-Jacob Disease (CJD).

Claim 44 (Currently Amended): The method of claim 20, wherein determining the amount of PrP^{Sc} in the sample comprises performing a ~~Protein Misfolding Cyclic Amplification~~ protein misfolding cyclic amplification (PMCA) assay.

Claim 45 (Currently Amended): The method of claim 44, wherein the sample is a normal brain homogenate containing PrP^C ~~as a source of normal PrP^C~~ and substrate.

Claim 46 (Currently Amended): The method of claim 44, wherein the sample is lipid rafts from an infection-sensitive neuroblastoma cell line N2a ~~as a source of normal~~ containing PrP^C and substrate.

Claim 47 (Currently Amended): The method of claim 20, which comprises determining the amount of PrP^{Sc} in the sample by performing a protein misfolding cyclic amplification assay (PMCA); and

wherein the protein is Apolipoprotein B, and
~~determining the amount of PrP^{Sc} in the sample comprises performing a Protein Misfolding Cyclic Amplification (PMCA) assay, and~~
wherein the sample is lipid rafts from infection sensitive neuroblastoma cell line N2a as ~~a source of~~ that contain normal PrP^C and substrate.

Claim 48 (Currently Amended): The method of claim 20, wherein said modulatory compound is an antagonist of Apolipoprotein B

~~wherein said modulatory compound is an antagonist of Apolipoprotein B or a fragment thereof.~~

Claim 49 (Currently Amended): The method of claim 20, wherein said modulatory compound is an antibody ~~raised against~~ that binds to Apolipoprotein B ~~or a fragment thereof.~~

Claim 50 (Previously Presented): The method of claim 20, wherein said modulatory compound is a LDL-receptor antagonist.

Claim 51 (Withdrawn): A method for treatment of a prion disease, comprising:
administering a modulator of Apolipoprotein B or a fragment thereof to a subject in
an amount sufficient to treat the prion disease.

Claim 52 (Withdrawn): The method of claim 51, wherein the modulator is an antagonist of Apolipoprotein B or a fragment thereof.

Claim 53 (Withdrawn): The method of claim 51, wherein the modulator is an antibody raised against Apolipoprotein B or a fragment thereof.

Claim 54 (Withdrawn): The method of claim 52, wherein the antagonist is a peptide or a protein that contains the sequence of SEQ ID NO: 3.

Claim 55 (Withdrawn): The method of claim 52, wherein the antagonist is a peptide or a protein that has a molecular weight from 30 and 40 kDa and has a sequence obtained from fragments of Apolipoprotein B between positions 3201-3558, 3548-3905, 3201-3905, 3291-3558, 3548-3815, and 3291-3815.

Claim 56 (Withdrawn): The method of claim 51, wherein the modulator is an antagonist of a LDL-receptor.

Claim 57 (Withdrawn): The method of claim 51, wherein the prion disease is selected from the group consisting of bovine spongiform encephalopathy (BSE) and a Creutzfeld-Jacob Disease (CJD).

Claim 58 (New): A method for the general diagnosis of a prion disease comprising:
(i) contacting a sample from a subject at risk of or suspected of having a prion disease with a peptide or a protein selected from the group consisting of Apolipoprotein B; a fragment of Apolipoprotein B; Apolipoprotein E; and a fragment of Apolipoprotein E;

(ii) contacting the preparation obtained in step (i) with PrP^C or PrP^C containing mixtures; and

(iii) determining the presence and/or an amount of PrP^{Sc} in said sample,

wherein the presence of PrP^{Sc} in said sample is indicative of the presence of prions in said subject.

Claim 59 (New): The method of claim 58, wherein (i) consists essentially of contacting a sample from a subject at risk of or suspected of having a prion disease with a peptide or a protein selected from the group consisting of Apolipoprotein B and a fragment of Apolipoprotein B.